



The Hanna Mining Company Annual Report 1973

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The Hoshun Maru (cover and above) was the first ocean carrier loaded at the MBR Aguas Claras marine terminal in Sepetiba Bay, west of Rio de Janeiro. The cargo of 156,000 tons of sinter feed was bound for Japan.

FINANCIAL HIGHLIGHTS

THE HANNA MINING COMPANY AND CONSOLIDATED SUBSIDIARIES

	For the Year	
	1973	1972
Net Sales and Operating Revenues	\$204,789,541	\$176,399,354
Depreciation and Depletion	9,814,598	7,739,843
Equity Income	8,788,650	4,550,022
Interest Income	3,274,464	1,847,945
Dividend Income	2,845,185	2,845,040
Net Income	23,564,211	20,360,390
Net Income per Share	\$2.67	\$2.30
Dividends per Share	\$1.35	\$1.35
	At the Year-end	
	1973	1972
Working Capital	\$ 49,392,124	\$ 46,680,438
Stockholders' Equity	280,980,740	269,343,202
Book Value per Share	\$31.80	\$30.49

Net Income — In the face of rapidly inflating costs and start-up difficulties at the new Canadian facilities, Hanna earnings rose only 16 percent over those of 1972, which were reduced by strikes.

Equity Income — Most of Hanna's equity income is derived from Iron Ore Company of Canada and the two Canadian concession companies: \$5,873,406 in 1973, as compared to \$3,023,420 in 1972. Included in equity income this year for the first time are Hanna's portion of the earnings of St. John d'el Rey Mining Company and Companhia Mineira de Aluminio—Alcominas. Hanna's 1972 earnings have been restated accordingly.

Dividend Income — Hanna's dividend income came from National Steel Corporation and Hollinger Mines, Limited, both of which paid the same as in 1972.

Working Capital at Year-end — Late in the year Hanna made arrangements to borrow \$15 million from Swiss banks, of which \$7.8 million was drawn down before year-end and applied to working capital. Hanna received \$3,509,000 from St. John d'el Rey Mining Company as repayment of advances made in prior years. During 1973 new equity investment in Iron Ore Company of Canada totaled \$5.3 million, investments in other affiliated companies were \$9.4 million, and capital expenditures amounted to \$13.3 million. Dividend payments to Hanna stockholders totaled \$11.9 million.

To the Stockholders of The Hanna Mining Company

For Hanna Mining 1973 was a year when numerous solid achievements tended to be overshadowed by results elsewhere which fell short of expectations.

Areas where performance equalled or exceeded expectations included our domestic iron ore operations, the new iron ore project in Brazil, the aluminum smelter in Brazil, and the nickel development in Guatemala. Demand for iron ore and nickel held strong throughout 1973 and plans for a major expansion of the National Steel iron ore pellet project in Minnesota were announced early this year.

On the other hand, the equipment and manpower problems encountered in the breaking in of new facilities at Iron Ore Company of Canada proved to be extremely difficult. By year-end considerable progress had been made in solving the mechanical and equipment problems, but many others still must be satisfactorily resolved before full production is reached.

As a result, iron ore production did not reach expected tonnages, even though Hanna-operated properties in North America produced a record 32 million tons of iron ore pellets, concentrates, and natural ores. The previous record, set in 1970, was 31.7 million tons. Of the 1973 total, 9.8 million tons were for the Hanna account.

Costs spiraled upward throughout the year, but the price relief granted by the U. S. government permitted recovery of only a portion of the cost increases that had been incurred. Prices must be freed to move as costs increase.

Particularly severe were the increases in Canadian fuel oil prices, which have quadrupled in the past few months, and are having a most serious effect on Iron Ore Company of Canada earnings.

The profit problem of the Canadian operations is magnified because a large portion of Iron Ore Company of Canada's prices are based on U. S. prices, which are controlled by the U. S. government, whereas none of IOC's costs are subject to any controls.

During 1973 interest on funds borrowed to finance the IOC expansion was capitalized along with break-in costs incurred in the start-up of the new facilities. This amounted to \$32.5 million. However, since the

construction and initial break-in period is substantially complete, interest and continuing break-in costs will be charged against IOC's income in 1974.

Thus far in 1974 operations at IOC have been well below capacity and production for the year is not expected to reach levels originally targeted. Problems, however, are being solved and capacity operating rates are anticipated before year-end.

In view of all of these factors, it now appears that IOC will incur a substantial loss for 1974, which in turn will have a serious adverse effect on Hanna's income.

The four Hanna-operated domestic iron ore pellet projects operated at capacity throughout the year, showing general improvement at all locations.

Capacity operations were maintained by the nickel smelter in Oregon. Demand was brisk throughout the year and the balance of the stockpile established in 1971 was sold.

An outstanding achievement was the completion of the initial phase of the Aguas Claras iron ore project in Brazil, in which Hanna holds an indirect one-third interest. Shipments began on schedule, within budget, and with a minimum of difficulties.

Also in Brazil, the Alcominas aluminum smelter operated at capacity, producing a premium product with excellent costs. Early in 1973 Hanna increased its ownership in Alcominas to 30 percent. The project is being doubled in size to a capacity of 60,000 metric tons a year.

In Guatemala, construction of a 25-million-pound-per-year nickel project has begun. Hanna will ultimately own a 12.8 percent interest. Financing is virtually complete and production is scheduled for 1976.

Plans are going forward to expand the National Steel pellet plant in Minnesota from an annual production capability of 2.6 million tons to 5.8 million tons, with the expanded production to begin in 1977. National Steel Corporation owns 85 percent of this project, with Hanna owning the balance and serving as manager.

There was no curtailment of production in 1973 at any Hanna-operated property in North America be-

cause of energy shortages, although the costs of fuel and power increased markedly.

The oil and gas problem is a serious one and its consequences are likely to be of long duration, so the ultimate solution will be the development of alternate sources of fuel. Hanna is undertaking a research program to determine the most feasible methods for using coal in the production of iron ore pellets. In the meantime we have taken all practicable steps to insure the uninterrupted operation of the properties we manage.

In February 1974 the Board of Directors established the Executive Policy Committee to provide overall management direction for Hanna and its principal affiliated companies, Iron Ore Company of Canada and St. John d'el Rey Mining Company, Limited.

Chairman of the new committee is W. A. Marting, who had served as president of the company since 1960. Serving on the committee are Gilbert W. Humphrey, chairman of the board, and three veteran company executives, who also were elected directors: James N. Purse, Robert F. Anderson, and J. W. Buford.

Mr. Marting was succeeded as president of Hanna by Mr. Purse, formerly an executive vice president; as chairman of Iron Ore Company of Canada by Mr. Anderson, also formerly an executive vice president, and as president of St. John d'el Rey by Mr. Buford, who will continue as senior vice president in charge of international operations. Each will serve as chief executive officer of the company for which he is responsible.

The establishment of the committee and the realignment of responsibilities reflect the tremendous growth in size and complexity of Hanna, IOC, and St. John d'el Rey in recent years. The move will enable Hanna to manage and direct more effectively its

world-wide operations and interests and those of its affiliates.

Mr. Purse had served as an executive vice president since 1969. For five years prior to that he was sales vice president. He became associated with Hanna in 1955 and spent four years as the company's sales representative in Europe.

Mr. Anderson also was elected an executive vice president in 1969, after seven years as vice president in charge of operations. He joined Hanna in Minnesota in 1947, transferred to ore sales in 1952, and was named manager of domestic sales in 1960.

Mr. Buford came to Hanna in 1950 after 15 years of railroad experience, and was active in the development of Iron Ore Company of Canada. In recent years he has devoted his attention to Hanna's mining and industrial interests overseas.

Demand for steel continues to increase the world over and it now appears that steel production will hold at a high level, at least through the first half of 1974. If energy problems result in major economic disruptions, however, the business outlook could worsen rapidly.

Union negotiations are scheduled this year for the domestic steel industry, including our U. S. iron ore operations.

In 1974 Hanna will be concentrating much of its attention on Iron Ore Company of Canada and the MBR Aguas Claras project in Brazil to bring the new facilities to their full production capabilities as rapidly as possible. Continued efforts will be directed toward cost reduction at all operations.

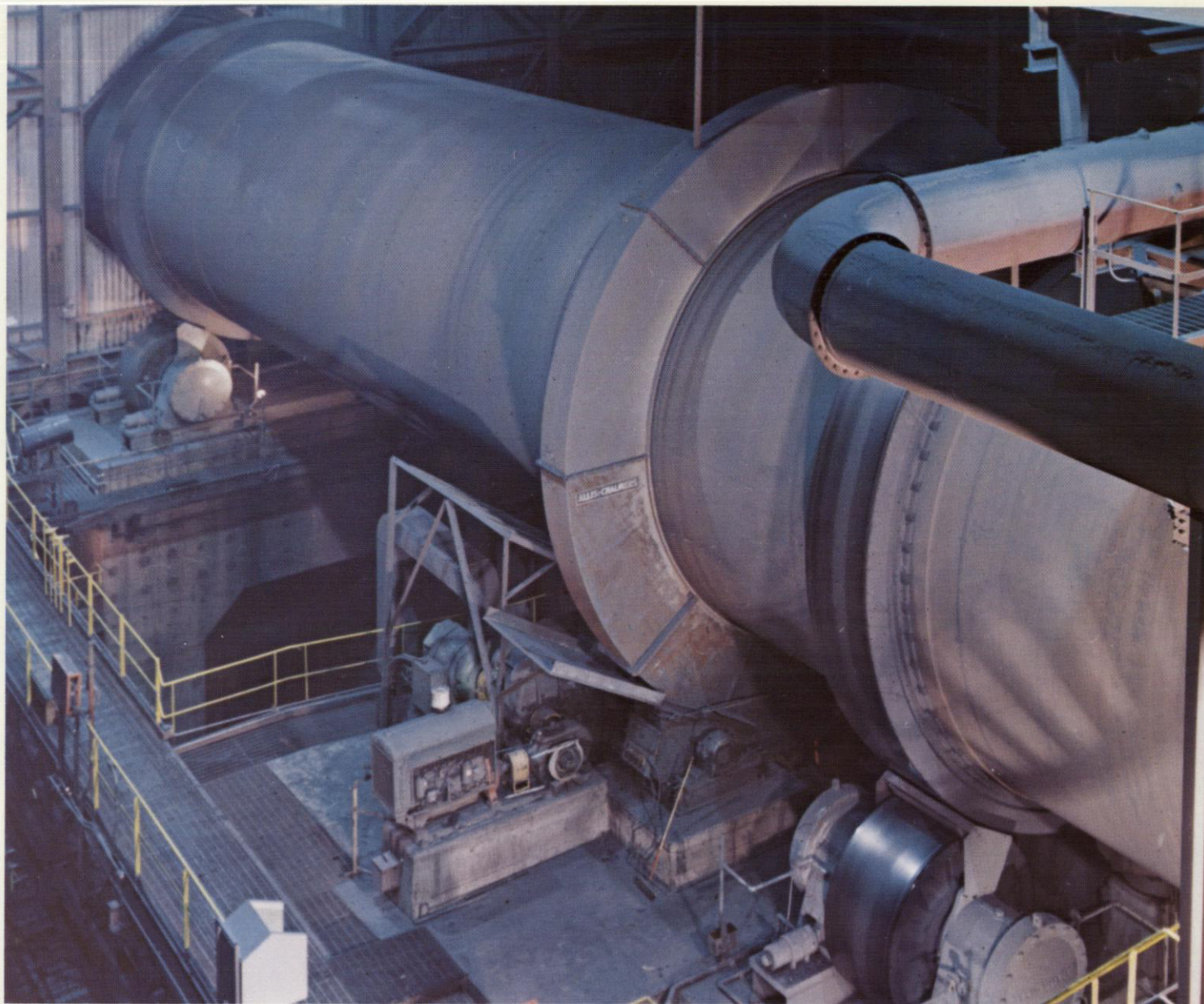
Last year was an extremely difficult one, but progress was made in all operations because of the dedication, interest and assistance of the men and women of Hanna. We extend our appreciation to them on behalf of the stockholders and the Board of Directors.

G. W. Humphrey
Chairman
Board of Directors

James N. Purse
President

W. A. Marting
Chairman
Executive Policy
Committee

Cleveland, Ohio, March 1, 1974



Pellets at the Butler taconite project are fired in this massive kiln, 20 feet in diameter and 140 feet long.

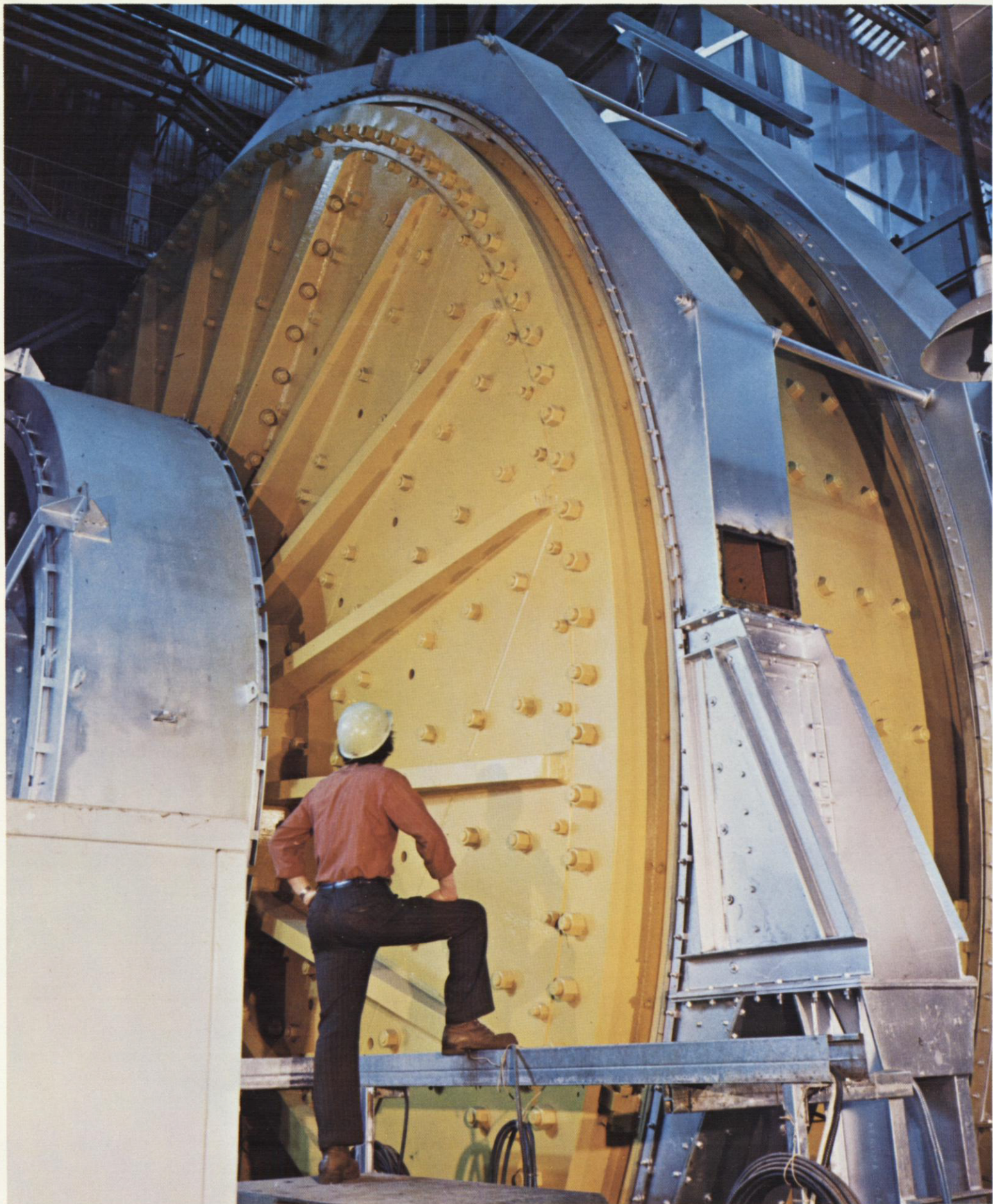
IRON ORE/UNITED STATES

Output of the four Hanna-operated iron ore pellet projects in the United States totaled 8.2 million tons in 1973, some 400,000 tons more than the year before, when production was interrupted by a six-week strike at the Minnesota projects.

All plants operated at capacity levels throughout the year. Butler, on Minnesota's Mesabi Range, produced 2.6 million tons, approximately 200,000 tons more than in 1972. National, also on the Mesabi, turned out 2.6 million tons, about 200,000 tons more than in the previous year. Producing the same tonnage as in 1972 were Groveland, on Michigan's upper peninsula, which produced 2 million tons, and Pilot Knob in Missouri, which produced 1 million tons. Sales of natural ore, at the 500,000-ton level, were slightly under the amount sold the previous year.

Prices of iron ore pellets and natural ores were increased in March and pellet prices were raised in October, partially offsetting earlier cost increases.

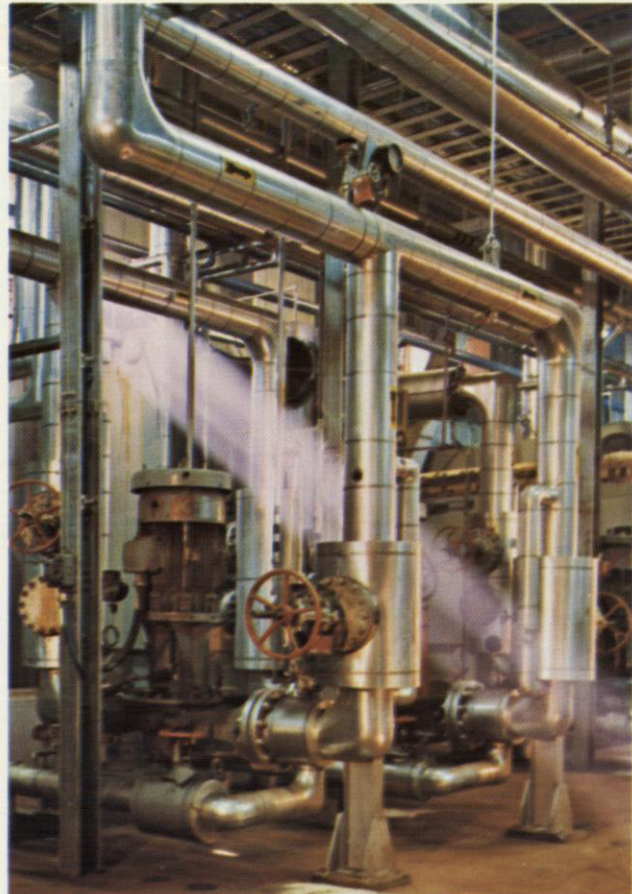
The two largest energy requirements of iron ore pellet production are electricity for grinding the ore and fuel for firing the pellets. Hanna's domestic pellet plants are being adequately supplied with power by local utilities, although rapidly rising costs of fuel for generating power have brought increases in the costs of this electricity. As for fuel for firing pellets, Butler, National, and Groveland have natural gas contracts and the Pilot Knob plant was converted from a system using natural gas or propane to the use of fuel oil. At present, supplies of diesel fuel for the trucks and other mining equipment are adequate at all locations.



First stage of ore grinding at Carol pellet project takes place in autogenous mills 34 feet in diameter.



Trucks capable of hauling 140 tons of ore are used in IOC mines.



Heat transfer facilities are among auxiliary functions in Sept-Iles pellet plant.

IRON ORE/CANADA

The 21.5 million tons of ore produced by Iron Ore Company of Canada consisted of 9 million tons of Carol pellets, 600,000 tons of Knob Lake pellets, 3.1 million tons of Carol concentrates, and 8.8 million tons of natural ore. In addition, 3 million tons of natural ore were mined at Schefferville for the Knob Lake pellet plant at Sept-Iles.

At the Carol complex at Labrador City, where concentrating capacity is being expanded by 10 million tons to 22 million tons a year, numerous mechanical troubles developed on start-up and most have now been solved. The principal problems remaining are a high turnover of people and a shortage of employees, particularly in maintenance. Carol lost a number of skilled people during the three-month strike in 1972 and progress in replacing them has been slow. The effects of this have been concentrate and pellet production levels substantially below capacity. To solve these problems training programs have been accelerated to speed the development of skills in the organization, but until the work force has been strengthened, production will continue to be adversely affected.

At Sept-Iles, difficulties developed in the 6-million-ton-per-year concentrating and pelletizing plants,

both in equipment and process. In the early start-up stages, sustained production was unobtainable because of the mechanical problems, and it was when these were being brought under control that problems of a process nature became apparent. While a number of modifications and improvements were made during the year, considerable additional work remains to be done in 1974.

Sufficient electric power is available for the operations of Iron Ore Company of Canada and as yet no serious shortage of fuel oil has developed. Prices for fuel oil rose drastically during the year and are still rising.

At capacity Iron Ore Company of Canada will be capable of producing more than 30 million tons of iron ore pellets, concentrates, and natural ore each year. Most of that tonnage has been sold under long-term contracts, some extending through 1996.

From the company's strategically-located deep water terminal on the Gulf of St. Lawrence, IOC's ore can move to all of the world's major steel-producing areas: the U. S. midwest, east coast, and gulf coast; Europe, and Japan. About half of the production will be consumed by U. S. steelmakers and about half will move to overseas customers.



The Aguas Claras ore preparation plant is at left, with the ore storage area extending to lower right. Building at far right is maintenance shop.

IRON ORE/BRAZIL

Regular movement of iron ore from the Aguas Claras mine near Belo Horizonte commenced on schedule in July, to begin building the stockpile of ore required for large volume shipments. The first ocean vessel was loaded at the Sepetiba Bay terminal late in November. By year-end the mine had produced 1,372,000 metric tons, of which 824,000 tons were shipped to the terminal. Of the latter amount, 495,000 tons were shipped to Japanese steel mills.

The project is being developed by Mineracoes Brasileiras Reunidas S. A.—MBR, 49 percent of which is owned by St. John d'el Rey Mining Company. Hanna owns 66.3 percent of the St. John Ordinary Shares and provides technical and management assistance to the Aguas Claras project. Fifty-one percent of MBR is owned by a Brazilian company, Empreendimentos Brasileiros de Mineracao S.A. — EBM.

Aguas Claras will produce extremely high grade ore at an initial rate of 11.5 million tons a year, of which

9.3 million tons have been sold under long-term contracts to steel producers in Japan, Europe, and Argentina. Production can be readily expanded as demand increases in world markets.

Included among the equipment and facilities at the mine are a primary crusher, an ore sizing and washing plant, a plant for producing pellet feed fines, rail load-out equipment, and such auxiliary facilities as transformer stations and maintenance shops.

At the Aguas Claras terminal, on Guaiba Island, about 40 miles west of Rio, the car dumper, two stacker-reclaimers, and the pier and shiploader were put into operation on schedule. The terminal will have the capability to handle 15 million tons or more annually, loading the largest ocean vessels at a rate of 7,000 tons an hour with an initial stockpile capacity of 1.5 million tons.

The project is costing approximately \$200 million and employs about 1,200 people.



Trains from mine to terminal can move 10,000 tons of ore in a single shipment.



Ore from the primary crusher is conveyed to surge pile before moving into preparation plant.

The rights offering of 2,172,357 Ordinary Shares at \$8.50 per share to St. John d'el Rey stockholders was successfully completed in July, raising \$18,465,035, most of which represented St. John's portion of the equity required for the Aguas Claras project. The balance was used to repay advances made to St. John by Hanna in prior years.

Hanna's holding in St. John now totals 2,640,938 Ordinary Shares, or 66.3 percent of the Ordinary

Shares outstanding.

From its other iron ore operations, MBR shipped 1,441,000 metric tons through the Port of Rio during 1973 and sold 758,000 tons to customers in the Brazilian market. Hanna's portion of St. John earnings for the 12 months ending December 31, 1973, was \$378,000. The St. John annual report for the fiscal year ending March 31, 1974, will be available to Hanna stockholders on request.



Three 10-inch electrodes are ready for immersion in an electric furnace for final refining step in the production of ferronickel.



Molten ferronickel is poured into an electric furnace for final purification.

NICKEL/UNITED STATES

Production at the mine and smelter in Oregon was 25,872,000 pounds, as compared with the record set in 1972 of 26,310,000 pounds. Costs rose sharply at the smelter last year, the result in large part of higher priced electric power and increased supply costs.

The smelter, which consumes large amounts of electric power, maintained full production by cutting back its output of ferrosilicon and drawing upon its inventory of this key ingredient in the smelting process. It also purchased additional blocks of power at premium prices. The power shortage in that area is a regional problem, stemming from diminished precipitation in the Bonneville Power Authority watershed during the fall and winter of 1972-73. Heavy rainfall late last year helped alleviate the shortage and the severity of the problem will be determined largely by the amount of snow that falls this winter.

Early in 1974 ferronickel was exempted from price controls and Hanna raised prices in line with increases already instituted by world nickel producers. For Hanna this means an increase averaging about 6 percent for 1974.

NICKEL/GUATEMALA

Excellent progress is being made on the first stage of a multi-phase development by Exploraciones y Explotaciones Mineras Izabal, S. A. (Exmibal), which is owned 80 percent by The International Nickel Company of Canada, Limited, and 20 percent by Hanna. Ground has been broken for a project with an initial annual capacity of more than 25 million pounds of nickel contained in matte. Provision has been made for the government of Guatemala, the International Finance Corporation, and the Central American Bank for Economic Integration to acquire up to 36 percent of Exmibal, in which case Hanna will hold 20 percent of the balance, or 12.8 percent of the company.

NICKEL/COLOMBIA

Work at the Cerro Matoso nickel laterite ore body did not advance as rapidly as expected, pending clarification and interpretation of existing government regulations and agreements. This concession, about 250 miles northwest of Bogota, is owned by Empresa Colombiana de Niquel, a company formed by a development agency of the Colombian government, and Compania de Niquel Colombiano S. A., which is owned by Standard Oil of California and Hanna.



ALUMINUM/BRAZIL

Performance was excellent at the Alcominas aluminum project, near Pocos de Caldas in the State of Minas Gerais. The project again produced 30,000 metric tons of high purity aluminum, with costs held below the amounts budgeted for the year. The prod-

uct is in great demand and order books for 1974 production are full.

Plans are well along to double the capacity of the plant. Funds for the expansion will come from borrowing and from internal cash flow. No new equity

Alumina is produced in the Alcominas plant prior to aluminum smelting.

will be required, according to current plans.

Hanna increased its ownership in Companhia Minera de Aluminio — Alcominas, which owns and operates the project, from 23.5 percent to 30 percent. The balance is owned by Aluminum Corporation of America and Brazilian interests. The project is integrated from the open pit bauxite mines through an alumina refining plant to an aluminum smelter. Hanna's share of Alcominas 1973 earnings was \$688,000.

PETROCHEMICALS/BRAZIL

Hanna has a 15 percent interest in Uniao de Industrias Petroquimicas S. A. (Unipar), a Brazilian holding company with varying ownerships in six petrochemical companies in the Santos-Sao Paulo area. All six now are in full operation, three reported profits for 1973, and one declared a dividend.

Demand for petrochemicals continues to grow in Brazil and as yet there is no threat of curtailment because of a shortage of petroleum. Products of the six plants include standard petrochemicals, as well as chlorine and caustic soda.

IRON ORE/AUSTRALIA

The Koolanooka property in Western Australia shipped 800,000 tons of iron ore to Japan in 1973, the next-to-last year of the sales contract. Discussions are being held with Japanese steel producers with a view to extending the contract with ore from another deposit. Hanna has a 25 percent interest in this project.

MARINE SERVICES

Hanna-operated vessels on the Great Lakes and in the St. Lawrence Seaway moved 7.4 million tons of ore last year, as compared to 7 million tons the year before. Grain shipments were 44.5 million bushels,

as compared to 46.1 million bushels in 1972.

To help meet domestic demand for pellets, Hanna-managed Great Lakes vessels have remained active later in the winter than ever before, some operating well into January.

The coal loading docks managed by Hanna on Lake Erie, at Sandusky and Ashtabula, handled 9.1 million tons, as compared with 11.9 million tons in 1972.

The Hanna-managed iron ore unloading docks in Cleveland and Philadelphia handled 10.4 million tons, as compared with 8.8 million tons the year before.

Volume increased substantially for our Ocean Marine Division, which provides world-wide ship chartering services through Skaarup Shipping Corporation, Greenwich, Connecticut.

EXPLORATION/RESEARCH

For Hanna, as a company in an extractive industry, exploration and research are essential. Geologists must locate new deposits of our traditional materials, and of minerals new to us, to replace the tonages being mined and to enlarge the scope of our operations. Metallurgists constantly seek to develop new and more effective methods for extracting minerals and preparing them for market.

Exploration — Geological activities during the year included drilling for gold in California, copper in Arizona, and base metals in Ontario and the Maritime Provinces. Hanna joined a syndicate drilling for copper in Arizona. From these activities several prospects were developed which warrant further work.

In Maine, the exploration program being conducted with Basic, Incorporated, brought further modest increases in the reserves. Work is continuing on several

prospects in the joint venture area.

The Louisiana oil and gas tracts began generating cash in 1973, although the development program will continue to require expenditures in 1974. All production platforms are to be in full operation this year. Hanna acquired an interest in these tracts in 1970 through Hamilton Brothers Oil Company.

Research—Work at the Hanna research center near Hibbing ranged from basic minerals studies to process assignments aimed at improving the efficiency of current operations.

Extensive work was conducted in connection with the start-up of Iron Ore Company of Canada's Sept-Iles pellet plant. This included grinding studies and tests of a variety of ore types and blends.

Pelletizing studies of the fines being produced at the MBR Aguas Claras project in Brazil indicated that high quality pellets can be produced from this material.

Research was conducted on Pilot Knob pellets to reduce their potassium and sodium content, thereby improving their performance in the blast furnace. Flotation equipment to accomplish this has been installed in the Pilot Knob concentrator section.

Pilot plant tests were conducted on nickel laterite ores from Oregon and Colombia in a rotary kiln electric furnace installation. This indicated a potential high recovery of nickel. Work will continue.

MANAGEMENT

D. N. Vedensky, a director since 1968, retired from the Board in April. Through his many years of association with Hanna as an officer and director, Mr.

Vedensky made important contributions to the company and to the technologies of the iron ore and nickel industries.

Following the annual stockholders' meeting in April, Frederick Heller was elected vice president in charge of sales and John S. Pyke, Jr., was elected secretary. Mr. Pyke succeeded Lawrence W. Spang, who continues as vice president for corporate and legal affairs. Mr. Spang had served as secretary since 1951.

Mr. Heller, formerly manager of iron ore sales, joined Hanna in 1957 and served as European sales representative from 1960 to 1965.

Mr. Pyke joined Hanna as a staff attorney in 1968 and had served as assistant secretary of Hanna and of St. John d'el Rey Mining Company.

A. A. Dor retired as vice president in charge of research and development and was succeeded by James L. Lake, who joined Hanna after many years of experience in minerals exploration, research, and operations.

Mr. Dor joined Hanna in 1966. During his association with the company, the scope of research activities was significantly expanded, bringing improvements in iron ore, nickel, and base metal treatment and metallurgy.

Early in 1974 the Hanna organization was saddened by the unexpected death of Gordon L. Way, vice president in charge of engineering. After nearly 20 years with Bechtel Corporation, Mr. Way joined Hanna in 1965 and played a key role in the design, construction, and improvements of Hanna properties in the U. S., Canada, and Latin America.

STATEMENTS OF CONSOLIDATED INCOME

THE HANNA MINING COMPANY AND CONSOLIDATED SUBSIDIARIES

	Year Ended December 31	
	1973	1972 (Restated— Note D)
INCOME		
Net sales and operating revenues	\$204,789,541	\$176,399,354
Equity in net income:		
Iron Ore Company of Canada	2,986,000	1,376,120
Other	5,802,650	3,173,902
Dividends:		
National Steel Corporation	2,750,000	2,750,000
Other	95,185	95,040
Interest	3,274,464	1,847,945
Sundry (principally gain on retirement of debt)	646,554	453,292
	<u>220,344,394</u>	<u>186,095,653</u>
COSTS AND EXPENSES		
Cost of goods sold and operating expenses	167,893,968	142,418,282
Selling, general, and administrative expenses	7,929,864	6,912,659
Depreciation and depletion — Notes A and B	9,814,598	7,739,843
Interest on long-term debt — Note B	2,804,613	2,742,539
Income taxes — Note C	8,337,140	5,921,940
	<u>196,780,183</u>	<u>165,735,263</u>
NET INCOME	<u>\$ 23,564,211</u>	<u>\$ 20,360,390</u>
NET INCOME PER SHARE	<u>\$2.67</u>	<u>\$2.30</u>

STATEMENTS OF CONSOLIDATED STOCKHOLDERS' EQUITY

	Common Stock	Capital Surplus	Retained Earnings	Treasury Stock	Total Stockholders' Equity
Balance January 1, 1972	\$8,871,050	\$21,337,531	\$236,842,557	\$(552,963)	\$266,498,175
Adjustment to equity basis — Note D			(5,588,689)		(5,588,689)
Balance January 1, 1972, as restated	8,871,050	21,337,531	231,253,868	(552,963)	260,909,486
Net income for 1972			20,360,390		20,360,390
Cash dividends — \$1.35 a share			(11,926,674)		(11,926,674)
Balance December 31, 1972	8,871,050	21,337,531	239,687,584	(552,963)	269,343,202
Net income for 1973			23,564,211		23,564,211
Cash dividends — \$1.35 a share			(11,926,673)		(11,926,673)
Balance December 31, 1973	<u>\$8,871,050</u>	<u>\$21,337,531</u>	<u>\$251,325,122</u>	<u>\$(552,963)</u>	<u>\$280,980,740</u>

See notes to financial statements.

CONSOLIDATED BALANCE SHEETS

THE HANNA MINING COMPANY AND CONSOLIDATED SUBSIDIARIES

ASSETS

	December 31	
	1973	1972 (Restated— Note D)
CURRENT ASSETS		
Cash	\$ 2,193,098	\$ 3,286,185
Short-term securities — Note A	29,011,441	17,615,563
Trade and sundry receivables	28,769,421	29,357,450
Inventories — Note A:		
Iron ore	13,230,380	15,512,771
Nickel	592,119	2,971,526
Supplies	7,104,368	6,167,488
	<u>20,926,867</u>	<u>24,651,785</u>
TOTAL CURRENT ASSETS	80,900,827	74,910,983
 PROPERTY, PLANT, AND EQUIPMENT — Note A		
Mineral and oil lands and leases	11,028,678	8,802,124
Plants and equipment	100,187,244	93,202,707
Vessels	5,415,919	3,086,919
	<u>116,631,841</u>	<u>105,091,750</u>
Less allowances for depreciation and depletion	64,357,572	59,308,924
TOTAL PROPERTY, PLANT, AND EQUIPMENT	52,274,269	45,782,826
 OTHER ASSETS		
Working assets — Interests in associated companies — Notes A and D		
Iron Ore Company of Canada — Note E	86,656,763	78,396,402
Unconsolidated subsidiaries:		
St. John d'el Rey Mining Company, Limited	15,644,128	19,236,498
Other unconsolidated companies	19,207,886	17,001,895
Other associated companies	15,365,032	12,751,651
Interests in other companies — Note A:		
National Steel Corporation — market price		
\$33,300,000 (\$44,300,000 in 1972)	63,316,182	63,316,182
Other companies	28,404,839	26,241,993
Sundry assets and deferred charges	5,019,611	6,312,295
TOTAL OTHER ASSETS	<u>233,614,441</u>	<u>223,256,916</u>
	<u>\$366,789,537</u>	<u>\$343,950,725</u>

LIABILITIES AND STOCKHOLDERS' EQUITY

	December 31	
	1973	1972 (Restated— Note D)
CURRENT LIABILITIES		
Trade and sundry payables	\$ 11,462,392	\$ 12,940,748
Accrued expenses	11,666,539	10,173,928
Federal income taxes — Note C	7,959,772	4,875,869
Current portion of long-term debt	420,000	240,000
TOTAL CURRENT LIABILITIES	31,508,703	28,230,545
LONG-TERM DEBT		
4¾ % Sinking Fund Debentures — payable		
\$2,000,000 annually — Note F	34,000,000	36,000,000
Less debentures in treasury	5,476,100	5,420,000
	28,523,900	30,580,000
7¾ % Bank Loans — Note F	7,817,020	—0—
Other (less current portion)	2,703,030	1,260,000
TOTAL LONG-TERM DEBT	39,043,950	31,840,000
RESERVES		
Deferred income taxes — Notes A and C	12,346,600	11,265,600
Other	2,909,544	3,271,378
TOTAL RESERVES	15,256,144	14,536,978
STOCKHOLDERS' EQUITY		
Common Stock, par value \$1 a share — Note G:		
Authorized 13,500,000 shares		
Issued 8,871,050 shares	8,871,050	8,871,050
Capital surplus	21,337,531	21,337,531
Retained earnings — Note F	251,325,122	239,687,584
Cost of treasury stock (36,500 shares)	(552,963)	(552,963)
TOTAL STOCKHOLDERS' EQUITY	280,980,740	269,343,202
	<u>\$366,789,537</u>	<u>\$343,950,725</u>

See notes to financial statements.

STATEMENTS OF CONSOLIDATED CHANGES IN FINANCIAL POSITION

THE HANNA MINING COMPANY AND CONSOLIDATED SUBSIDIARIES

	Year Ended December 31	
	1973	1972
		(Restated— Note D)
SOURCE OF FUNDS		
Net income for the year	\$ 23,564,211	\$ 20,360,390
Depreciation and depletion — Notes A and B	9,814,598	7,739,843
Deferred income taxes — Notes A and C	1,081,000	771,900
Equity in net income over dividends	(5,106,320)	(1,877,000)
Funds provided from operations	29,353,489	26,995,133
Increase in long-term debt	9,727,990	—0—
Decrease in interests in associated companies	4,762,218	739,284
Other	1,647,232	1,172,829
	<u>45,490,929</u>	<u>28,907,246</u>
APPLICATION OF FUNDS		
Expenditures for property, plant, and equipment	13,260,668	6,497,324
Expenditures for interests in associated and other companies	14,706,028	33,759,768
Cash dividends	11,926,673	11,926,674
Reduction of long-term debt	2,524,040	473,000
Reduction in reserves	361,834	3,672,092
	<u>42,779,243</u>	<u>56,328,858</u>
Increase (decrease) in working capital	2,711,686	(27,421,612)
Working capital beginning of year	46,680,438	74,102,050
Working capital end of year	<u>\$ 49,392,124</u>	<u>\$ 46,680,438</u>
DETAIL OF INCREASE (DECREASE) IN WORKING CAPITAL		
Cash and short-term securities	\$ 10,302,791	\$ (21,518,001)
Receivables	(588,029)	(2,730,128)
Inventories	(3,724,918)	(3,307,023)
Trade and sundry payables	1,478,356	(179,218)
Accrued expenses	(1,492,611)	94,483
Federal income taxes	(3,083,903)	458,275
Current portion of long-term debt	(180,000)	(240,000)
Total Increase (Decrease)	<u>\$ 2,711,686</u>	<u>\$ (27,421,612)</u>

See notes to financial statements.

NOTES TO FINANCIAL STATEMENTS

Note A—Summary of Accounting Policies

Interests in Associated and Other Companies:

Interests in Iron Ore Company of Canada, unconsolidated subsidiaries, other associated companies, and certain other companies are carried at cost adjusted for equity in earnings and losses since dates of acquisition.

Interests in National Steel Corporation and certain other companies (with a carrying value of \$11,000,000) are stated at cost with dividends recorded as earnings when received. The carrying value of the interest in National Steel Corporation approximates the underlying net assets.

Short-Term Securities:

Short-term securities are stated at cost plus accrued interest, which approximates market value.

Inventories:

Inventories of iron ore, nickel, and supplies are stated at the lower of average cost or market.

Property, Plant, and Equipment:

Property, plant, and equipment are stated on the basis of cost. Provisions for depreciation and depletion have been computed principally on the unit-of-production and straight-line methods at rates sufficient to amortize the cost of the assets over their estimated productive lives.

Maintenance, repairs, and minor renewals are charged to operating expenses, whereas betterments are capitalized. Exploration, research, and development costs are charged to operating expenses as incurred.

Income Taxes:

Deferred income taxes arise principally from accelerated depreciation claimed for tax purposes and undistributed earnings of associated companies carried at equity. The investment tax credit is recorded as a reduction of the current provision for federal income taxes.

Discount on Debentures:

Discount on purchases of the Company's debentures for treasury prior to December 31, 1972, is included in income as the debentures are retired to meet the annual sinking fund requirement. Discount on debentures purchased after such date is included in income at the time of purchase.

Trade Transactions:

In accordance with industry practice, there are excluded from sales and cost of goods sold amounts applicable to iron ore traded with other producers.

Note B—Classification of Expenses

The Company, through its ownership interest, is entitled to its proportionate share of the production of

certain associated mining companies at cost. The Company's proportionate share of depreciation (1973 — \$3,399,921; 1972 — \$2,645,020) and interest on long-term debt (1973 — \$1,229,016; 1972 — \$1,283,711) has been so classified in the statements of consolidated income and the remaining costs are included in cost of goods sold and operating expenses.

Note C—Income Taxes

The provision for income taxes payable to federal, foreign, and state governments includes deferred income taxes of \$1,081,000 in 1973 and \$771,900 in 1972.

The effective tax rate is less than the statutory rate principally because of the effect of percentage depletion, dividend received deduction, credit for foreign taxes paid, investment tax credit (\$409,600 in 1973 and \$321,600 in 1972), and a credit of \$1,100,000 in 1972 for federal taxes provided in prior years.

Note D—Accounting Changes

In accordance with Opinion 18 of the Accounting Principles Board, the Company changed to the equity method of accounting in 1972 for its interest in Iron Ore Company of Canada and certain other associated companies and in 1973 adopted the same method of accounting for its interest in St. John d'el Rey Mining Company, Limited, and certain other foreign associated companies. The prior year financial statements have been restated, which resulted in an increase in net income for 1972 of three cents per share. Also, the 1972 financial statements have been restated, consolidating a subsidiary previously carried on the equity method.

Note E—Iron Ore Company of Canada

The Company's 26.37% interest in Iron Ore Company of Canada carried on the consolidated balance sheet includes debentures of \$18,757,817 at December 31, 1973, and \$13,483,817 at December 31, 1972. Following is a summary of financial information of Iron Ore Company of Canada:

	1973	1972
Net current assets	\$ 21,257,000	\$ 51,240,000
Investments and other assets	17,646,000	23,588,000
Property, plant and equipment — net	708,462,000	598,334,000
	<u>747,365,000</u>	<u>673,162,000</u>
Long-term debt and reserves	(481,638,000)	(418,759,000)
Net assets	<u>\$265,727,000</u>	<u>\$254,403,000</u>
Sales and operating revenues	<u>\$281,085,000</u>	<u>\$183,851,000</u>
Net income	<u>\$ 11,324,000</u>	<u>\$ 5,219,000</u>

NOTES TO FINANCIAL STATEMENTS (continued)

Iron Ore Company of Canada follows a policy of capitalizing interest during the construction period on funds borrowed to finance major expansion projects. Interest capitalized amounted to \$17,430,000 in 1973 and \$11,980,000 in 1972. Preoperating costs, aggregating \$15,100,000 in 1973, incurred in connection with the start-up of major plant facilities were also capitalized and will be amortized over five years. Since the construction and initial break-in period is substantially complete, Iron Ore Company of Canada intends to expense similar items commencing January 1, 1974.

Future minimum rental commitments as of December 31, 1973 for all noncancelable leases of Iron Ore Company of Canada, aggregating approximately \$104,000,000, are payable in varying amounts through 1997.

Reference is made to pages 3 and 7 of this annual report for comments relative to operating problems of Iron Ore Company of Canada.

Note F—Long-Term Debt

The Indenture, relating to the 4 $\frac{3}{4}$ % Sinking Fund Debentures, contains limitations relative to cash dividends and other stock payments. At December 31, 1973, approximately \$137,000,000 of retained earnings was free of such limitations.

Under a loan agreement with three Swiss banks, additional borrowings were made in January, 1974, to raise bank loans to \$15,226,000, the maximum amount permitted under the agreement. The loans mature on December 31, 1974, and may be extended for one year. The agreement provides for possible replacement of the notes with long-term Swiss franc bonds, at any time prior to December 31, 1975.

Note G—Stock Options

At December 31, 1973 and 1972, no stock options were outstanding; however, there are 100,000 common shares reserved for future options.

Note H—Contingent Liabilities and Commitments

Under certain conditions, the Company might be required to make payments on long-term obligations of certain associated mining companies in proportion to the Company's interest in such companies. At December 31, 1973, the Company was contingently liable under such arrangements in the amount of approximately \$32,000,000.

In relation to the development of a major iron ore project in Brazil, the Company may be obligated to advance up to an additional \$12,500,000.

The Company has guaranteed indebtedness of approximately \$1,400,000 at December 31, 1973, incurred by certain key employees to purchase common shares under stock options.

Note I—Pensions

The Company and its subsidiaries have various pension plans covering substantially all of their employees. Total pension expense which was \$3,064,000 in 1973 and \$2,502,000 in 1972 includes, as to certain of the plans, amortization of prior service cost over appropriate periods. The Company's policy is to fund pension cost accrued. The actuarially computed value of vested benefits for all plans as of the latest actuarial valuation exceeded the total of the pension fund and balance sheet accruals by approximately \$3,500,000.

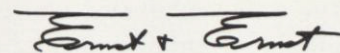
ACCOUNTANTS' REPORT

Board of Directors
The Hanna Mining Company

We have examined the consolidated financial statements of The Hanna Mining Company and consolidated subsidiaries for the years ended December 31, 1973 and 1972. Our examinations were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine the financial statements of certain companies carried at equity. The equity in net income of such companies amounted to 14% and 8% of the consolidated income before income taxes for the years ended December 31, 1973 and 1972, respectively. The statements of such companies were examined by other auditors whose reports thereon have been furnished to us, and our opinion expressed herein, insofar as it relates to the amounts included for such companies, is based solely on the reports of other auditors.

In our opinion, based upon our examinations and the reports of other auditors, the accompanying balance sheets and statements of income, stockholders' equity, and changes in financial position present fairly the consolidated financial position of The Hanna Mining Company and consolidated subsidiaries at December 31, 1973 and 1972, and the consolidated results of their operations and changes in stockholders' equity and financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis after restatement for the change, with which we concur, in the method of accounting for investments in certain associated companies as described in Note D to the financial statements.

Cleveland, Ohio
February 21, 1974

Ernst & Ernst

SIX-YEAR FINANCIAL COMPARISON

(IN THOUSANDS)

THE HANNA MINING COMPANY AND CONSOLIDATED SUBSIDIARIES

	1973	1972	1971	1970	1969	1968
INCOME						
Net Sales and Operating Revenues . . .	\$204,790	176,399	197,089	203,442	175,988	153,104
Operating Income before Depreciation and Depletion . . .	\$ 28,966	27,068	27,355	29,218	27,988	17,069
Depreciation and Depletion . . .	\$ 9,815	7,740	7,149	7,165	7,113	5,943
Equity and Dividend Income . . .	\$ 11,634	7,395	15,414	18,099	9,300	14,025
Income Taxes	\$ 8,337	5,922	6,087	10,864	8,592	1,535
Net Income	\$ 23,564	20,360	29,572	31,267	21,500	22,493
Net Income Per Share (A)	<u>\$ 2.67</u>	<u>2.30</u>	<u>3.35</u>	<u>3.57</u>	<u>2.47</u>	<u>2.59</u>
Cash Dividends	\$ 11,927	11,927	11,485	11,403	10,658	8,684
Dividends Per Share (A)	<u>\$ 1.35</u>	<u>1.35</u>	<u>1.30</u>	<u>1.30</u>	<u>1.225</u>	<u>1.00</u>
BALANCE SHEET						
Working Capital	\$ 49,392	46,680	74,102	74,141	63,663	56,370
Property, Plant, and Equipment . . .	52,274	45,783	38,775	36,942	39,982	42,669
Other Assets	233,615	223,257	196,282	179,300	167,494	165,317
Long-Term Debt	(39,044)	(31,840)	(30,813)	(30,860)	(34,591)	(41,583)
Total Invested Capital	\$296,237	283,880	278,346	259,523	236,548	222,773
Less Reserves	15,256	14,537	17,437	16,701	15,671	14,086
Total Stockholders' Equity	<u>\$280,981</u>	<u>269,343</u>	<u>260,909</u>	<u>242,822</u>	<u>220,877</u>	<u>208,687</u>
Shares Outstanding (A)	8,835	8,835	8,835	8,835	8,747	8,688
Book Value Per Share (A)	<u>\$ 31.80</u>	<u>30.49</u>	<u>29.53</u>	<u>27.49</u>	<u>25.25</u>	<u>24.02</u>

(A) Adjusted for 2-for-1 stock split in April, 1969.

Amounts have been restated to reflect the equity method of accounting.

HANNA MINING PROPERTIES, AFFILIATES, AND OPERATIONS

Iron Ore/United States

Wholly Owned

Groveland Mine

Open pit mine, concentrator and pellet plant;
Michigan

Partially Owned

Butler Taconite Project (37.5%)

Open pit mine, concentrator and pellet plant;
Minnesota

Hanna Ore Mining Company (15%)

Pierce Mine; Minnesota

National Steel Pellet Project (15%)

Open pit mine, concentrator and pellet plant;
Minnesota

Pilot Knob Pellet Company (50%)

Underground mine, concentrator and pellet
plant; Missouri

Ore Sales Division

Cleveland, Ohio

Iron Ore/Canada

Partially Owned

Iron Ore Company of Canada (26.37%)

Open pit mines at Schefferville, open pit mines,
concentrator and pellet plant at Labrador City,
Quebec North Shore & Labrador railroad,
concentrator and pellet plant and loading terminal
at Sept-Iles; Quebec and Labrador

Hollinger North Shore Exploration Co., Limited (40%)

Quebec concessions

Labrador Mining and Exploration Co., Limited (22.3%)

Labrador concessions

Managing Agents

National Steel Corporation of Canada, Limited

Open pit mine, concentrator and pellet plant; Ontario

The Company's common stock is listed on the
New York and Pacific Coast Stock Exchanges.
The ticker symbol is HNM

Transfer Agents:

The National City Bank of Cleveland, Cleveland, O.
Bankers Trust Company, New York, New York

Registrars:

Union Commerce Bank, Cleveland, Ohio
The Chase Manhattan Bank, New York, New York

The Hanna Mining Company

Is An Equal Opportunity Employer M/F

Nickel Operations

Wholly Owned

Nickel Mountain Mine and Hanna Smelter
Open pit mine and nickel smelter; Oregon

Overseas Operations

Partially Owned Iron Ore

St. John d'el Rey Mining Company, Limited (66.3%)
49% ownership of Mineracoes Brasileiras Reunidas
S.A.—MBR; open pit mines and properties, crushing
and screening facilities and vessel loading terminal;
Brazil

Geraldton Joint Venture (25%)
Open pit mines; Western Australia

Partially Owned Aluminum

Companhia Mineira de Alumínio (30%)
Open pit bauxite mine, alumina refining plant and
aluminum smelter; Brazil

Partially Owned Nickel

Exploraciones y Explotaciones Mineras Izabel, S.A.
(20%)
Open pit mine and smelter under construction;
Guatemala

Partially Owned Petrochemicals

Uniao de Industrias Petroquimicas S.A. (15%)
Holding company with varying interests in six
petrochemical plants; Brazil

Ore Sales Agent
London, England

Marine Operations

Domestic

Operators of Ore Unloading and Coal Loading Docks
Cleveland, Ashtabula and Sandusky, Ohio, and
Philadelphia, Pennsylvania

One Wholly Owned and One Partially Owned
(33⅓ %) Lake Vessel

Operators of Lake Vessels Owned by
National Steel Corporation

Seaway

Partial Ownership in Four Vessels Operating
in St. Lawrence Seaway

Ocean

Three Wholly Owned Bulk Cargo Vessels

Chartering and Shipping Agency
Greenwich, Connecticut

Partially Owned Ore and Coal Unloading Dock
(25%)
Rotterdam, Holland

THE HANNA MINING COMPANY

100 Erieview Plaza, Cleveland, Ohio 44114

Directors

Robert F. Anderson
Chairman, Iron Ore Company of Canada

Stephen D. Bechtel, Jr.
President, Bechtel Corporation

George F. Bennett
President, State Street Investment Corporation

Warren Bicknell, Jr.
Retired

J. W. Buford
Senior Vice President,
The Hanna Mining Company
President, St. John d'el Rey
Mining Company, Limited

Gilbert W. Humphrey
Chairman, The Hanna Mining Company

R. L. Ireland, III
Partner, Brown Brothers Harriman & Company

George H. Love
Honorary Chairman,
Consolidation Coal Company

Walter A. Marting
Chairman, Executive Policy Committee,
The Hanna Mining Company

William H. Moore
Chairman, Bankers Trust Company

Nathan W. Pearson
Financial Advisor

James N. Purse
President, The Hanna Mining Company

George A. Stinson
Chairman and President,
National Steel Corporation

George W. Wyckoff
Investment Management

Executive Policy Committee

Walter A. Marting, Chairman

Robert F. Anderson

J. W. Buford

Gilbert W. Humphrey

James N. Purse

Officers

Gilbert W. Humphrey
Chairman of the Board

Walter A. Marting
Chairman, Executive Policy Committee

James N. Purse
President

J. W. Buford
Senior Vice President,
International Operations

Walter P. Weber
Senior Vice President,
Properties and Government Affairs

B. M. Andreas
Vice President,
Administration, Mining Properties

H. F. Andrews
Vice President, Marine Services

Frederick Heller
Vice President, Sales

J. L. Lake
Vice President, Research and Development

F. H. Lee
Vice President, Nickel Division

Lawrence W. Spang
Vice President, Corporate and Legal Affairs

Russell E. Beal
Treasurer

L. H. Carlson
Comptroller

J. S. Pyke, Jr.
Secretary

Executive Committee

Gilbert W. Humphrey

George H. Love

Walter A. Marting

